Summary of Results for 100 year Return Period (+50%)

Half Drain Time : 1479 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	26.297	0.447	0.3	31.0	O K
30 min Summer	26.449	0.599	0.4	41.5	O K
60 min Summer	26.613	0.763	0.5	52.9	O K
120 min Summer	26.780	0.930	0.5	64.5	O K
180 min Summer	26.872	1.022	0.5	70.9	O K
240 min Summer	26.931	1.081	0.6	74.9	O K
360 min Summer	27.008	1.158	0.6	80.3	O K
480 min Summer	27.055	1.205	0.6	83.6	O K
600 min Summer	27.084	1.234	0.6	85.6	O K
720 min Summer	27.102	1.252	0.6	86.8	O K
960 min Summer	27.115	1.265	0.6	87.7	O K
1440 min Summer	27.117	1.267	0.6	87.9	O K
2160 min Summer	27.102	1.252	0.6	86.8	O K
2880 min Summer	27.074	1.224	0.6	84.9	O K
4320 min Summer	27.004	1.154	0.6	80.0	O K
5760 min Summer	26.932	1.082	0.6	75.0	O K
7200 min Summer	26.866	1.016	0.5	70.5	O K
8640 min Summer	26.809	0.959	0.5	66.5	O K
10080 min Summer	26.757	0.907	0.5	62.9	O K
15 min Winter	26.351	0.501	0.4	34.8	O K
30 min Winter	26.522	0.672	0.4	46.6	O K
60 min Winter	26.705	0.855	0.5	59.3	O K
120 min Winter	26.894	1.044	0.6	72.4	O K
180 min Winter	26.999	1.149	0.6	79.7	O K
240 min Winter	27.066	1.216	0.6	84.3	O K
360 min Winter	27.155	1.305	0.7	90.5	O K
480 min Winter	27.212	1.362	0.7	94.4	O K
600 min Winter	27.248	1.398	0.7	96.9	O K
720 min Winter	27.272	1.422	0.7	98.6	O K
960 min Winter	27.294	1.444	0.7	100.2	O K
1440 min Winter	27.290	1.440	0.7	99.9	O K
2160 min Winter	27.269	1.419	0.7	98.4	O K
2880 min Winter	27.229	1.379	0.7	95.6	O K
4320 min Winter	27.129	1.279	0.6	88.7	O K
5760 min Winter	27.026	1.176	0.6	81.6	O K
7200 min Winter	26.932	1.082	0.6	75.0	O K
8640 min Winter	26.850	1.000	0.5	69.4	O K
10080 min Winter	26.778	0.928	0.5	64.4	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	135.580	0.0	19
30 min Summer	91.216	0.0	34
60 min Summer	58.567	0.0	64
120 min Summer	36.294	0.0	124
180 min Summer	27.017	0.0	184
240 min Summer	21.749	0.0	242
360 min Summer	16.006	0.0	362
480 min Summer	12.864	0.0	482
600 min Summer	10.849	0.0	602
720 min Summer	9.435	0.0	720
960 min Summer	7.561	0.0	950
1440 min Summer	5.523	0.0	1156
2160 min Summer	4.026	0.0	1540
2880 min Summer	3.213	0.0	1960
4320 min Summer	2.333	0.0	2772
5760 min Summer	1.857	0.0	3632
7200 min Summer	1.555	0.0	4400
8640 min Summer	1.347	0.0	5192
10080 min Summer	1.192	0.0	6048
15 min Winter	135.580	0.0	19
30 min Winter	91.216	0.0	34
60 min Winter	58.567	0.0	64
120 min Winter	36.294	0.0	122
180 min Winter	27.017	0.0	180
240 min Winter	21.749	0.0	240
360 min Winter	16.006	0.0	356
480 min Winter	12.864	0.0	472
600 min Winter	10.849	0.0	586
720 min Winter	9.435	0.0	700
960 min Winter	7.561	0.0	916
1440 min Winter	5.523	0.0	1296
2160 min Winter	4.026	0.0	1640
2880 min Winter	3.213	0.0	2104
4320 min Winter	2.333	0.0	2988
5760 min Winter	1.857	0.0	3864
7200 min Winter	1.555	0.0	4752
8640 min Winter	1.347	0.0	5536
10080 min Winter	1.192	0.0	6360

©1982-2017 XP Solutions

Rainfall Details

Rainfall Model	FSR	Ratio R	0.348	Cv (Winter)	0.840
Return Period (years)	100	Summer Storms	Yes	Shortest Storm (mins)	15
Region	England and Wales	Winter Storms	Yes	Longest Storm (mins)	10080
M5-60 (mm)	19.300	Cv (Summer)	0.750	Climate Change %	+50

Time Area Diagram

Total Area (ha) 0.123

Time (mins) From:	To:	Area (ha)
0	4	0.123

©1982-2017 XP Solutions

Model Details

Storage is Online Cover Level (m) 27.750

Complex Structure

Trench Soakaway

Infiltration Coefficient Base (m/hr)	0.27400	Invert Level (m)	25.850	Cap Volume Depth (m)	1.600
Infiltration Coefficient Side (m/hr)	0.27400	Trench Width (m)	1.0	Cap Infiltration Depth (m)	1.600
Safety Factor	10.0	Trench Length (m)	23.0		
Porosity	0.95	Slope (1:X)	0.0		

Cellular Storage

Invert Level (m)	25.850	Infiltration Coefficient Side (m/hr)	0.00000
Porosity	0.95		
Infiltration Coefficient Base (m/hr)	0.00000	Safety Factor	2.0

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	50.0	0.0	1.600	50.0	0.0	1.601	0.0	0.0

©1982-2017 XP Solutions